APPENDIX

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RC 5600/5600D/4500
TROUBLE SHOOTING GUIDE
cont.

(VERSION 1.1, SEPTEMBER 1992)

SERVICE CALL
EXPLANATIONS + CHECKS

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ADVICE DISPLAY

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- PAPER JAM UNDER DRUM PULL OUT DRUM
- ADD PAPER
- NO MASTER ON DRUM
- REPLACE INK BOTTLE
- CLOSE FRONT COVER
- PRINT MALFUNCTION
- ORIGINAL MISFEED
- ORIGINAL JAM RESET ORIGINAL
- ORIGINAL JAM OR OVER SIZE; REMOVE JAMMED ORIGINAL
- REPLACE MASTER ROLL
- SET LEAD EDGE OF MASTER UNDER GREEN FILM
- SET ORIGINAL FEED TABLE
- CLOSE MASTER LOADING UNIT
- SET ORIGINAL IN PLACE
- REMOVE CUT MASTER STRIP
- MASTER CUT MALFUNCTION PRESS RESET BUTTON
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- MASTER MIS-FEED RESET MASTER
- SET MASTER DISPOSAL BOX IN PLACE
- EMPTY DISPOSAL BOX
- USED MASTER NOT DISCHARGED PULL OUT DRUM AND CHECK MASTER JAM IN MASTER DISPOSAL UNIT

FUSES ON PCBs

T1 CALL SERVICE

MAIN MOTOR LOCK

1) A Detection Sensor remains activated for two seconds after the Main Motor is ON.

2) A Detection Sensor is not activated for five seconds after the Main Motor is ON.

[EXPLANATION]

1) This will be displayed if the Drum does not rotate. (The Drum rotation is detected by "A" Magnet Sensor)

2) T-10 will be displayed if the "A" magnet is defective after drum rotation.

[CHECK]

[Displayed T-1 when the Drum does not rotate]

1) Check mechanism on Drum and drive.

2) Check Fuse (F24 8A) on Power Supply PCB.

3) Check Main Motor -- A defective motor has 24V across CN2 Pin 1 and 2 on Power Supply PCB when the start button is pressed and the motor should be on.

T-2 CALL SERVICE

Elevator motor lock will be displayed:

1) If the Elevator Lower Limit SW is still activated 2 seconds from when the Elevator Motor has moved up.
2) If the Elevator Upper Limit Sensor is not activated 7 seconds from when the Elevator Motor has moved up.
3) If the Elevator Upper Limit Sensor is still activated 2 seconds from when the Elevator Motor has moved down.
4) If the Elevator Lower Limit SW is not activated 7 seconds from when the Elevator Motor has moved down.

[EXPLANATION]

This will be displayed when Elevator Motor will not move.

Possible cause:

1) Paper Feed Table is locked in the lower limit position
2) Paper Feed Table is locked in the upper limit position
3) Paper Feed Table is locked in the middle position.

[CHECK]

If Paper Feed Table will not move, check:

1) Elevator mechanism.
2) Elevator Motor action
   (A defective motor has 24V across the motor connector when the motor should be on.)
3) Fuse (F22 3.15A) on the Power Supply PCB.

[Paper Feed Table is moving]

1) Check Upper Limit Sensor (Adj.:See Page III-12)
   * LED D10 on the System CPU PCB is on when the sensor is detected.)
   * Test Mode 02 (short beep) when the sensor is on.
2) Check Lower Limit SW
   * Test Mode 03 (short beep) when the SW is on.

T-3 CALL SERVICE

CLAMP ERROR will be displayed if:

1) If the clamp Safety SW is still activated after 4 sec. from when the Clamp Solenoid is ON.
2) If the Clamp Safety SW is not activated 4 seconds from when the Clamp Solenoid is ON.
3) If the Angular Sensor (0,180) is not activated after 8 seconds from when the Clamp Motor is ON.
4) If the Clamp Safety SW is not detected when the Clamp Solenoid is OFF.

[EXPLANATION]

This will be displayed when Elevator Motor will not move.

Possible cause:

1) Paper Feed Table is locked in the lower limit position
2) Paper Feed Table is locked in the upper limit position
3) Paper Feed Table is locked in the middle position.

[CHECK]

If Paper Feed Table will not move, check:

1) Elevator mechanism.
2) Elevator Motor action
   (A defective motor has 24V across the motor connector when the motor should be on.)
3) Fuse (F22 3.15A) on the Power Supply PCB.

[Paper Feed Table is moving]

1) Check Upper Limit Sensor (Adj.:See Page III-12)
   * LED D10 on the System CPU PCB is on when the sensor is detected.)
   * Test Mode 02 (short beep) when the sensor is on.
2) Check Lower Limit SW
   * Test Mode 03 (short beep) when the SW is on.

T-3 CALL SERVICE

CLAMP ERROR will be displayed if:

1) If the clamp Safety SW is still activated after 4 sec. from when the Clamp Solenoid is ON.
2) If the Clamp Safety SW is not activated 4 seconds from when the Clamp Solenoid is ON.
3) If the Angular Sensor (0,180) is not activated after 8 seconds from when the Clamp Motor is ON.
4) If the Clamp Safety SW is not detected when the Clamp Solenoid is OFF.

[EXPLANATION]

1) The Clamp Plate is opened by the Clamp Solenoid and the Clamp Motor
2) Clamp Solenoid Unit moves down or up controlled by the Clamp Safety SW and Angular Sensor.
3) * 1) and 2) will occur when the Clamp Solenoid Unit is not working properly.
   * 3) will occur when Clamp Plate wouldn't open or close properly.
   * 4) will occur when Clamp Solenoid Unit is down during printing.

[CHECK]

After repair of T-3 problem, check Clamp Plate and Angular Magnet Plate are not bent.

** If T-3 is displayed without Master Clamp action:

1) Check Clamp Solenoid Unit. It should not be down.
2) Check Clamp Safety SW action.(See Page ____)
   ---Test Mode 13 (short beep) when SW ON.

** If T-3 is displayed when Clamp Plate will not open/close.

1) Check Clamp Solenoid (See Page _____) -- Test Mode 53.
2) Check Clamp Motor action -- Test Mode 54, 55.
3) Check A Magnet position (Drum Home Position).(See Page ____) Drum rotation speed (See Page ____) (The Drum will overrun when Free Rotation Speed is too fast.)
4) Clamp Plate is mechanically binding with master sensor or other areas.

** If Clamp Plate opens/closes properly:

1) Check Clamp Plate and Magnet Plate for bends.
2) Check Angular Sensor position and action. (See Page ____)
   -- Check by LED D8 and D9 on the System CPU PCB.
   -- Test Mode 09 and 10 when short beep is detected.

T-4 CALL SERVICE

INK OVERFLOW

1) This will be displayed if the Overflow Sensor is detecting Ink.

[EXPLANATION]

* If ink bead was increased abnormally, the sensor will detect it.
* T-4 displayed will not clear until the sensor is clean.

[CHECK]

1) Check for foreign matter in the Squeegee Roller Unit and rotation of the Squeegee Roller. (See Page ____)
2) Check Ink Sensor
   -- LED D15 on the System CPU PCB. LED ON when no ink.
   -- Test Mode 37. Short beep when detecting ink.
3) Overflow sensor
-- LED D14 on the System CPU PCB. LED ON when no ink.
-- Test Mode 38. Short beep when detecting ink.
4) Check Fuse F25 (3.15A) on the Power Supply Unit.
   *Pinched wire.

T-5 CALL SERVICE

VERTICAL POSITIONING MOTOR LOCK

1) This will be displayed if the Vertical Positioning Sensor is not switched from ON to OFF after 12 sec. from when the Vertical Positioning Motor is turned on.

[EXPLANATION]

* This will be displayed only when as follows:
  * Main Power SW is ON.
  * Pressed All Reset Button.
  * Pressed Center button on the Operation Panel.

[CHECK]

1) Check mechanism of Positioning Motor.
2) Gear mesh, play and loose screw. (See Page.)
3) Check Vertical Positioning Motor action.

-- Test Mode 71.

4) Vertical Positioning Sensor.
   -- Test Mode 22 Short beep when cut sensor light-pass.
5) Check Fuse F30 (3.15A).

T-6, T-7, T-8, T-9 CALL SERVICE

CORRESPONDENCE ERROR

T-6 : Between Operation Panel and System PCBs.
T-7 : Between Operation Panel and Digitizer.
T-8 : Between System PCBs and Computer.
T-9 : Between System PCBs and Sorter.

[CHECK]

Check connection on the connector or open harness.

T-10 CALL SERVICE

Malfunction of the "A" Magnet Sensor

This will be displayed if the "A" Magnet Sensor is not detected until the Pressure Detection Sensor is detected two times after the Main Motor is turned on.

[EXPLANATION]

* This will be displayed if "A" Magnet sensor is defective when the Main Motor is rotating.
* If Main Motor doesn't rotate, T-1 will be displayed.

[CHECK)

1) Check "A" Magnet Sensor position and detection.(See Page ____)
   -- LED D20 on the System CPU PCB. When detected LED ON.
   -- Test Mode 08. Short beep when detected "A" Magnet.
2) Check Pressure Sensor.
   -- LED D16 on the System CPU PCB. LED is ON when the sensor light path is broken.
   -- Test Mode 07. Short beep when the sensor light path is broken.

FUSES ON THE POWER SUPPLY PCB

FUSE	AMPS	VOLTAGE	SYMPTOM AND PARTS
F1	10A	AC120V	[No power]
F21	3.15A	DC 24V	[Master mis-loading] *Load Pulse Motor,*Loading Fan,*Storage Fan, *T.P.H.Pressure Motor,*Cutter Motor, *Write Pulse Motor.
F 22	3.15A	DC 24V	[T-2], [Paper Mis-Feed or Jam], [Master Disposal Jam] *Vertical Transport Motor, *Lateral Transport Motor, *Master Disposal Solenoid, *Paper Separation Fan,*Pressure Solenoid, *Paper Feed Clutch,*Elevator Motor, *Drum Lock Solenoid, *Ink Motor,*Counter, *Drum Home Position Lamp.
F23	1A	DC 24V,18V	[Paper Jam; Right] *Suction Fan
F24	8A	DC 24V	[T-1] *Main Motor
F25	3.15A	DC +12V	[T-4],[Image Trouble] *Drum PCB Lamp,*Image PCB, *CCD.
F26	3.15A	DC -12V	[No LCD Display],[Image Trouble] *Operation Panel, *Image PCB,*CCD
F27	5A	DC 5V	[No LCD and Print Number Display] *Operation Panel,
F28	5A	DC 5V	[Blown with F1, Suction Fan is Rotating]
F29	3.15A	DC 24V	For option
F30	3.15A	DC 24V	[Display SET DISPOSAL BOX then T-5] *Clamp Motor, *Clamp Solenoid, *Vertical Positioning Motor, *Print Pressure Motor, *Read Pulse Motor, *Original Feed Solenoid.

T-11 CALL SERVICE

PRESSURE MOTOR LOCK

1) This will be displayed if Pressure Roller VR is not turned to the specified position after 20 sec. from when the Pressure Roller Motor is turned on.

[EXPLANATION]

* Pressure Roller pressure is detected by Pressure VR.

[CHECK]

1) Check Pressure Motor action.
2) Check Pressure VR.

T-12 CALL SERVICE

DISPOSAL DUCT MOTOR LOCK (JAPANESE VERSION ONLY)